

WHAT IS CLAIMED:

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1. A filtering device for passing a fluid in a body vessel defined by a wall and for blocking the passage through the vessel of emboli, comprising:
a filtering portion constructed to be disposed in the vessel including a directional member made from a pliable material having properties of blocking the passage of the fluid and the emboli and being expandable by the fluid flow in the vessel to maintain its outer periphery against the vessel wall in order to provide a seal against the passage of the fluid and the emboli through the pliable material, and
a filtering member disposed interiorly of the directional member and made from a material providing for the passage of the fluid and for the blocking of the emboli.
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2. The filtering device of claim 1, wherein:
the filtering member is made from a material selected from a group consisting of blood filter material and a braided/woven biocompatible material.
3. The filtering device of claim 1, further including:
a catheter portion having a shaft,
the filtering portion being disposed on the shaft at an interior position on the filtering member.
4. The filtering device of claim 1, wherein
the directional member is disposed at an acute angle relative to the vessel wall.
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5. The filtering device of claim 2, wherein:
the directional member is elongated to be disposed at its outer end against
the vessel wall,
the directional member is disposed relative to the filtering member to direct
5 to the filtering member the fluid and the emboli received by the directional member,
a catheter portion having a shaft is provided, and
the filtering portion is disposed on the shaft at an interior position on the
filtering member.

6. The filtering device of claim 5, wherein:
the filtering portion is disposed at an acute angle relative to the vessel wall
and the filtering member is made from a material selected from a group consisting of
a blood filter material and a braided/woven biocompatible material.

7. The filtering device of claim 5, wherein:
the catheter portion includes an outer sheath which covers the filtering
portion until the filtering portion is to be deployed, the filtering portion being at least
partially retractable into the sheath after the filtering portion traps and collects emboli in
5 the vessel.

8. The filtering device of claim 7, wherein:
the catheter portion includes a plurality of restraining wires attached near
the inlet opening of the directional member and extending along the length of the catheter

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portion, the restraining wires being retractable from a location outside the body vessel to
5 collapse the directional member.

Sub 7 9. The filtering device of claim 8, wherein:
the restraining wires are retractable to draw at least the inlet opening of the
directional member into the sheath of the catheter portion.

10. A method of passing a fluid in a vessel while blocking the passage through
the vessel of emboli created from a lesion in the vessel, comprising the steps of:

disposing in the vessel, at a position past the lesion in the direction of the
fluid flow in the vessel, a filtering device having a filtering assembly having a filtering
5 member made from a material having properties of passing the fluid in the vessel while
blocking the passage of the emboli in the vessel and having a directional member made
from a material having properties of being deployable by the fluid flow in the vessel to
be disposed against the wall of the vessel and of directing the passage of the fluid and the
emboli in the vessel into the filtering member; and

10 disposing in the vessel, at the position of the lesion in the vessel, an
interventional device for treating the lesion and opening the vessel at the position of the
lesion.

11. The method of claim 10 further including the step of removing the filtering
device with any trapped contained in the filtering member from the vessel after the
interventional device has treated the lesion.

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12. The method of claim 11 wherein the steps of removing the filtering member from the vessel is performed by collapsing the directional member and withdrawing at least a portion of the directional member into a sheath and removing both the sheath and filtering device from the vessel.

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